

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/749,338	12/31/2003	Tai-Cheng Yu		8223	
25859 75	590 11/21/2005		EXAM	EXAMINER	
WEI TE CHUNG			SCHECHTER, ANDREW M		
FOXCONN IN	TERNATIONAL, INC. EX DRIVE		ART UNIT	PAPER NUMBER	
SANTA CLAR			2871		
			DATE MAILED: 11/21/200	DATE MAILED: 11/21/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

· :							
		Application No.	Applicant(s)	7			
Office Action Summary		10/749,338	YU ET AL.				
		Examiner	Art Unit				
		Andrew Schechter	2871				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet wi	ith the correspondence addre	iss			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DV CHEVER IS LONGER, FROM THE MAILING DV CHEVER IS LONGER, FROM THE MAILING DV CHEVER IS LONGER IN THE MAILING DV CHEVER IS SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 36(a). In no event, however, may a revill apply and will expire SIX (6) MON, cause the application to become AB	CATION.  eply be timely filed  ITHS from the mailing date of this comm  BANDONED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 04 No	ovember 2005.					
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D	). 11, 453 O.G. 213.				
Disposit	ion of Claims						
4)⊠	4)⊠ Claim(s) <u>1-13 and 15-17</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	Claim(s) <u>16 and 17</u> is/are allowed.						
6)⊠	Claim(s) <u>1-5,7 and 13</u> is/are rejected.						
7)⊠	Claim(s) <u>6,8-12 and 15</u> is/are objected to.						
8)[	Claim(s) are subject to restriction and/o	r election requirement.					
Applicat	ion Papers						
9)[	The specification is objected to by the Examine	er.					
10)⊠	The drawing(s) filed on 31 December 2003 is/a	re: a)⊠ accepted or b)□	] objected to by the Examine	er.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).				
_	Replacement drawing sheet(s) including the correct	· · · · · · · · · · · · · · · · · · ·	• •	, ,			
11)[	The oath or declaration is objected to by the Ex	caminer. Note the attached	d Office Action or form PTO-	·152.			
Priority (	under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for foreign  ☐ All b)☐ Some * c)☐ None of:		119(a)-(d) or (f).				
	1. Certified copies of the priority documents						
	<ul><li>2. Certified copies of the priority documents</li><li>3. Copies of the certified copies of the priority</li></ul>		• • • • • • • • • • • • • • • • • • • •				
	<ol> <li>Copies of the certified copies of the prior application from the International Bureau</li> </ol>		received in this National Sta	age			
* 5	See the attached detailed Office action for a list	, , , , , , , , , , , , , , , , , , , ,	received				
		or and commed copies med					
<b>A</b> 44	AAC)						
Attachmen  1) Notice	e of References Cited (PTO-892)	4) Intensiew S	Summary (PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s	s)/Mail Date				
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	5)	nformal Patent Application (PTO-15	52)			
	• • • • • • • • • • • • • • • • • • • •						

Application/Control Number: 10/749,338 Page 2

Art Unit: 2871

#### **DETAILED ACTION**

#### Continued Examination

- 1. Applicant's submission filed on 4 November 2005 has been entered.
- 2. The previous office action of 3 October 2005 is withdrawn. It is replaced with the present office action.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 2, 5, 7, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by *Shinohara et al.*, U.S. Patent No. 6,474,827.

Shinohara discloses [see Fig. 38, for instance] a light guide plate comprising a transparent plate [52] having a light emitting surface [56], and a bottom surface opposite to the light emitting surface; and a plurality of optical embossments [72] arranged on the light emitting surface continuously side-by-side in rows and columns. Claim 1 is therefore anticipated.

The transparent plate is substantially a flat panel, so claim 2 is also anticipated. The optical embossments are integrally formed with the light guide plate, so claim 5 is also anticipated. The optical embossments have uniform dimensions, and are evenly

distributed on the emitting surface of the transparent plate, so claim 7 is also anticipated.

Considering the additional limitations of claim 13, it is a backlight system, the optical embossments are evenly distributed on the light emitting surface, and there is a light source [54] arranged at a side of the light guide plate, so claim 13 is also anticipated.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Shinohara et al.*, U.S. Patent No. 6,474,827 as applied above, in view of *Uratani*, U.S. Patent No. 5,317,430.

Shinohara does not appear to disclose the material used to make its transparent plate. Uratani discloses an analogous transparent plate [4] made from PMMA. It would have been obvious to one of ordinary skill in the art at the time of the invention to make Shinohara's transparent plate (and optical embossments) from PMMA, motivated by Uratani's teaching that PMMA is an acryl resin of high light transmittivity [col. 5, lines 65-66] which enables efficient light usage. Claims 3 and 4 are therefore unpatentable.

Application/Control Number: 10/749,338 Page 4

Art Unit: 2871

## Allowable Subject Matter

7. Claims 6, 8-12, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

- 8. Claims 16 and 17 are allowed.
- 9. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not disclose the device of claim 6, in particular the additional limitation that each of the optical embossments is substantially hemispherical or partially hemispherical, so claim 6 would be allowable if rewritten appropriately.

The prior art does not disclose the device of claim 8, in particular the additional limitation that there are dots evenly distributed on the bottom surface (such dots are known, and are shown in *Shinohara's* prior art figures providing diffuse reflection, but *Shinohara's* device appears to rely on specular rather than diffuse reflection from the surface opposite the embossments). Claim 8 would therefore be allowable if rewritten appropriately, as would claims 9-12 which depend from claim 8.

The prior art does not disclose the additional limitation of claim 15, that the embossments are further applied to upon the bottom surface of the transparent plate (*Shinohara* discloses embossments on both sides in Fig. 34, but not with the embossments on the light emitting surface being arranged in continuously in rows and columns); so claim 15 would be allowable if rewritten appropriately.

Art Unit: 2871

The prior art does not disclose the device of claim 16, in particular the limitations that the light guide plate has optical embossments on the light emitting surface and dots on the bottom surface which are both evenly distributed and of uniform dimension, and wherein the dots are generally hemispherical, partially hemispherical, dome-shaped, frustum-shaped, or cylindrical. Similarly, the prior art does not disclose the device of claim 17, where the dots are hollow regions which are hemispherical, partially hemispherical, concave, frustum-shaped, or cylindrical. Claims 16 and 17 are therefore allowed.

#### **Conclusion**

10. Applicant's amendment (of 22 July 2005) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/749,338 Page 6

Art Unit: 2871

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (571) 272-2302. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Schechter Primary Examiner Technology Center 2800

15 November 2005